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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-------------------------|------------------|
| 10/030,171 | 05/16/2002 | Kenji Fujiwara | 020006 | 6245 |
| 23850 | 7590 | 11/19/2003 | EXAMINER | |
| ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP | | | LAM, THANH | |
| 1725 K STREET, NW | | | ART UNIT | PAPER NUMBER |
| SUITE 1000 | | | | 2834 |
| WASHINGTON, DC 20006 | | | DATE MAILED: 11/19/2003 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/030,171 | FUJIWARA ET AL. | |
| | Examiner Thanh Lam | Art Unit 2834 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 23 September 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-64 is/are pending in the application.
- 4a) Of the above claim(s) 15-64 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,3-5 and 7-12 is/are rejected.
- 7) Claim(s) 2,6,13 and 14 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

| | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

1. Applicant's election without traverse of claims 1-14 read on species C of figs. 5-7, and 9-12 on 9/23/2003 is acknowledged.

DETAILED ACTION

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1,3-5,7-12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Matsunobu et al. (pn. 6,034,459)

Regarding claim 1, Matsunobu et al. (figs. 1-12) discloses a brushless motor comprising: a stator; and a rotor having a lateral surface opposed to said stator, wherein said stator includes: a plurality of radially extending iron core (2), and a generating and plurality of windings for respectively magnetic fields in said iron cores, located wherein said rotor includes: a plurality of permanent magnets, and magnetic force line induction bodies (7) between said permanent magnets (8) and said lateral surface.

Regarding claim 3, Matsunobu et al. (figs. 1-12) discloses the rotor has a plurality of holes into each of which said plurality of permanent magnets are inserted in an axis direction of said rotor.

Regarding claim 4, Matsunobu et al. (figs. 1-12) discloses three-phase direct currents are for said plurality of windings are provided for said plurality of windings.

Regarding claim 5, Matsunobu et al. (figs. 1-12) discloses said plurality of windings include: a first set of windings, and a second set windings, and wherein said first set of three-phase windings and said second set of three-phase windings are arranged to be symmetrical with respect to a line.

Regarding claim 7, Matsunobu et al. (figs. 1-12) discloses wherein a number of said windings is N and a number of said permanent magnets P, and said P is greater than said N.

Regarding claim 8, Matsunobu et al. (figs. 1-12) discloses 8. one of prime factors of said P is greater than any of prime factors of said N.

Regarding claim 9, Matsunobu et al. (figs. 1-12) discloses said prime factors of said N includes and said prime factor of said P 2 includes and 7.

Regarding claim 10, Matsunobu et al. (figs. 1-12) discloses 10 said P satisfies an equation: $12 < P < 30$.

Regarding claim 11, Matsunobu et al. (figs. 1-12) discloses said N 12 and said P 14.

Regarding claim 12, Matsunobu et al. (figs. 1-12) discloses a section of said permanent magnet on a flat plane vertical to a central axis of said rotor is rectangular, said rectangle has short sides and long sides longer than said short sides, and said long sides are opposed to said lateral surface.

Allowable Subject Matter

4. Claims 2,6,13-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Lam whose telephone number is (703) 308-7626. The examiner can normally be reached on m-f 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0656.


Thanh Lam
Primary Examiner
Art Unit 2834